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ABSTRACT

A study identified the meanings of the term "equity in vocational education" to Minnesota administrators of vocational education at the secondary and postsecondary levels. Findings of interviews with 48 administrators indicated they held different meanings for the phrase. About three-fourths expressed a concept of equality (educational programs guided by notions of sameness, likeness, proportionateness). The remainder voiced a meaning of equity (distribution of resources in relation to educationally relevant characteristics of students). Administrators identified a wide variety of personal and professional experiences as factors that contributed to their interpretation; reported that equity entered into decisions relating to personnel, students, and curriculum; and suggested processes to use to indicate the status of equity in vocational education. They identified five categories of factors that facilitate the provision of equity in vocational education and seven categories of factors that serve as barriers to the provision. Administrators felt progress had been made in equity-related policies and practices in vocational education and placed responsibility for equity in vocational education with people in a variety of positions. Their meanings of equity were correlated significantly with their location. (The instrument and 12 data tables are appended.) (YLB)

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# Equity in Vocational Education: A Study of Meaning

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# EQUITY IN VOCATIONAL EDUCATION: A STUDY OF MEANING

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August 1987

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The second group of people to whom we express appreciation are the 48 administrators of vocational education at the secondary and post-secondary levels in Minnesota who made it possible for us to conduct this study. They gave generously of their time and thoughts during our interviews with them. Because we promised them confidentiality, we cannot recognize them by name but we acknowledge our indebtedness to them.

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Chapter I

# Formulation of the Study

> Equity is a roguish thing. For Law we have a measure, know what to trust to; Equity is according to the conscience of him that is Chancellor, and as that is larger or narrower, so is Equity. 'Tis all one as if they should make the standard for the measure we call a "foot" a Chancellor's foot; what an uncertain measure would this be! One Chancellor has a long foot, another a short foot, a third an indifferent foot. 'Tis the same thing in the Chancellor's conscience.
>
> Table Talk (1689)
> John Selden

'Equity' is one of those concepts--like 'democracy,' 'freedom,' and 'liberty'--which is upheld as one of our society's virtues and goals. And, like those other concepts, its meaning is difficult to articulate. What is 'equity'? What does it mean to be equitable'? When we encounter the word, we feel that it stands for something good, something right, something we should want to experience and practice in our lives. Somehow we know that it stands for the opposite of favoritism, discrimination, oppression, and exploitation.

Although we usually do not, and perhaps most of us could not, articulate the meanings we attach to the term 'equity,' we employ the concept in all aspects of our lives--politics, economics, law, employment, income, power, status, interpersonal relations, and, certainly, education. It is in our daily lives when we become aware of equity--when we sense inequity. We hear a child weep, "It's not fair that Johnny gets to stay up later than I do." We overhear a colleague saying, "He sure is paid too much for what he does." We read about the rich and political leaders being defended by high-priced lawyers and receiving what often seems to be a light sentence, if any at all. And we who are educators are challenged by students who demand explanations for the way we distribute grades, privileges, and attention among them.

Not only does the idea of equity enter into our daily lives, but also we find the term frequently used in the educational literature. Much of

this writing about 'equity in education' uses the label as if it had a well-defined and shared meaning. However, it is rare to find authors even stipulate a nominal definition for the term. Very often terms like 'equity' and 'equality' are used interchangeably, and even if definitions are stated at the outset of the writing, subsequent paragraphs frequently switch the focus of the discussion to certain narrow topics (important topics, but not the same as the broader concept) such as "enrollment in nontraditional training courses" or "sex role perceptions of vocational educators."

In our educational planning and implementation, we generally skirt the issue of equity. It is difficult to define, it is not amenable to precise measurement by some standardized tool, and it doesn't reduce itself to being counted and correlated. Further, we don't know how to be "objective" about equity, and we would rather deal with issues about which we think we can be "objective," such as educational efficiency and productivity.

However, to not seriously deal with the issue of equity in education and to not deal with it continuously (unfortunately, it is not one of those things that we can "take care of once and for all") is to shirk our responsibility. Compliance with legislative mandates might be one of our motivators for being concerned about equity, but there is a more basic reason which taps our conscience and compels our attention: our commitment to the welfare of those whom we serve in the educational enterprise. We care that each individual develops and experiences "the good life," which includes a sense of personal dignity and worth regardless of the blessings and curses bestowed upon him or her by fate. We must, therefore, examine the question: What is equity in vocational education?

## Purpose of the Study

This study does not provide a complete answer to the question of the meaning of equity in vocational education; to do so would require a more extensive research effort. The purpose of this study was to identify the meanings of 'equity in vocational education' held by one group of practitioners who have considerable influence over vocational education programs in Minnesota--administrators of vocational education at the secondary and post-secondary levels. Further, the study sought to gain understanding about the administrators' perspectives on several aspects related to equity, such as: influences on their thinking about equity, practices involving equity, indicators of equity, importance of equity, progress in providing equity, facilitators of equity, barriers to equity, and locus of responsibility for providing equity. By understanding vocational education administrators' views about equity, perhaps we can make 'equity' less of a roguish thing as we think about, plan, and deliver vocational education programs.

## Research Procedures

### Sampling Plan

Several factors guided the process of developing a sampling plan. First, a decision was made to sample administrators of both secondary and postsecondary vocational education programs, and to randomly select a group at each level. A sample of 50 administrators from throughout the State of Minnesota was judged adequate and appropriate to fulfill the purpose of this study.

The first step in the sampling procedure was to obtain a list of names of administrators of postsecondary and secondary vocational education programs from the Minnesota Department of Education. After the list was updated, 78 postsecondary and 106 secondary administrators comprised the population.

The second step of the procedure involved randomly sampling a set of names in each group (secondary and postsecondary). Using a microcomputer random sampling routine, 30 names were selected from each group. The five extra names in each group were included because it was expected that some administrators would not be able to participate. Even with this precaution, it was necessary to randomly select one additional postsecondary name and 20 additional secondary administrators to obtain the desired sample size.

Several reasons accounted for administrators' inability or unwillingness to participate in the study. The original sample contained 11 administrators who were no longer in the stated position, and, therefore, they were not considered appropriate for inclusion in the sample. Eight administrators said they were too busy to participate; some of these made a point to say that they would like to be involved in the study but did not have any time available for interviewing within the next several weeks. Another nine replied that they did not want to participate in the study; some of these gave no reason, others said they did not want to be interviewed because the interview would be tape recorded, and a couple said they did not want to discuss equity. Generally, the administrators who were interviewed seemed interested in and concerned about the topic of equity in vocational education and expressed interest in learning of the results of the study.

### Sample

The actual sample consisted of 48 vocational education administrators throughout Minnesota (Table A-1). Of these, 23 were administrators of secondary programs and 25 were administrators of postsecondary programs. More were directors (36) than assistant directors (12), they were most likely of age 40 to 59, and generally had earned at least a master's degree. The sample was overwhelmingly male, reflecting the dominance of male administrators in vocational education. Most of the administrators were full-time administrators, although a few were classified as part-time because of teaching duties. For the most part, they had been in their

position for at least five years and had been administrators at least seven years. Almost half of the sample was from rural areas, and most of the other half was from Standard Metropolitan Statistical Area (SMSA) 5, which includes the Twin Cities area of Minneapolis-St. Paul.

## The Interview

A semistructured interview, using open-ended questions, was developed to elicit from administrators of secondary and postsecondary vocational education programs their concept of the phrase 'equity in vocational education' (Appendix B). In addition to specifically asking administrators to articulate their conceptions of 'equity in vocational education' (question #5), a series of other questions was asked. These questions not only provided useful information in their own right, but also served to flesh out the administrators' concepts of 'equity in vocational education' as they related to aspects such as: influences on one's thinking about equity, practices involving equity, indicators of equity, importance of equity, progress in providing equity, facilitators of equity, barriers to equity, and locus of responsibility for providing equity (questions #6-20). The administrators also were asked to describe their work and work experience (questions #1-4) and to indicate their educational background and approximate age (questions #21 and 22). It was agreed that the interviewers could and should, when deemed appropriate, use probes to gain clarification and explanation of responses to the interview questions.

The interview schedule was pilot-tested with 10 vocational education administrators in face-to-face interviews and telephone interviews. Based on responses to the pilot interview, some of the questions were reworded and reordered, and others were deleted.

The information obtained from the two types of pilot interviews--person-to-person and telephone--was similar. Therefore, telephone interviews were used to collect data for the study because they offered the advantage of not requiring travel expenses and time.

A letter (Appendix C) introducing the study was sent to a random sample of secondary and postsecondary administrators. The letter stated that the administrators would be telephoned by one of the researchers regarding their participation in the study. This phone call provided an opportunity for the administrators to ask questions about the study and to set a time for the interview if they agreed to participate.

The interviews were conducted between March 15 and April 22, 1983. The average length of the interview was 40 minutes; the range was 20 to 70 minutes. The two graduate research assistants were each randomly assigned to contact and interview half of the sample.

## Data Analysis Procedures

Data analysis began with a thematic analysis of responses to the interview questions. The coding system used in this analysis was developed both conceptually and empirically. Using the interview questions as a

guide, the researchers identified various dimensions on which to analyze the responses (e.g., meaning of equity, importance of equity, facilitators of equity). Responses to the pilot interviews were used to help specify the themes used for coding each of these dimensions. The coding system was revised during analysis of the pilot interviews and during a preliminary analysis of a sample of the interviews in the actual study.

All three researchers were involved in developing the content analysis procedures. The two graduate research assistants listened together to tapes in order to practice and discuss the coding system and to develop consistency in using it. Following that, the research assistants independently coded their respective interviews. They checked the reliability of their coding by listening to tapes coded by the other. The relatively few disagreements on analysis were resolved early in the analysis phase.

As a further check on coding reliability, the project director randomly selected and listened to 24 of the taped interviews; she coded interviews for the meaning of equity expressed in them. The cases where the coding was not in agreement were handled by having the research assistant/s and the project director listen together to the tapes and arrive at a concensus.

Data were entered into two computer systems. Numerical data were entered onto a mainframe computer disk for the purpose of statistical analysis using the SPSS (Nie, Hull, Jenkins, Steinbrenner, Bent, 1975) subprograms, Frequencies and Crosstabs. Concurrently, keywords and excerpts of responses to interview questions were entered, by use of a microcomputer, on the data diskettes of a keyword filing system. The purpose of this latter operation was to enable the researchers to locate the statements made by the respondents to specific questions and thereby supplement the SPSS output with characteristic comments of the respondents to further communicate, elaborate upon, and complement the statistical data.

## Context of the Study

The context in which social programs operate inevitably influence the thoughts and actions of those involved in the programs. Such influences are almost always complex, usually imperceptible, and rarely direct and singular in effect. Three factors involved in the context of vocational education in Minnesota at the time of the interviews are discussed here briefly: financial conditions, governance issues, and criticisms of vocational education. Administrators' responses to some interview questions take on additional meaning when considered in light of these contextual factors.

### Financial Conditions

The State of Minnesota experienced acute financial problems during the 1982 and 1983 fiscal years. Because of this, public education in the State

was plagued by reductions in funding and, consequently, services it provided to students. Of course, vocational education also felt the financial pinch in various ways.

For the first time since their inception in the early 1960's, Minnesota's system of Area Vocational Technical Institutes (AVTI's)--instead of increasing their program offerings--began closing programs and terminating staff. Short of cutting programs and personnel, the AVTI's, in order to attract students and maintain if not increase enrollment, allowed students to enter programs more frequently during an academic year.

Minnesota's secondary school vocational centers, established in the late 1960's and early 1970's, were seriously affected by the State's economic problems. These centers had originated in rural areas of the State as a way for small school districts to pool resources and offer vocational programs more varied than each district could offer independently. The centers proliferated around the State but toward the end of the 1970's were beginning to close as State funds for education decreased and as the school-age population shrank. Many districts decided they could be more efficient by offering less and offering it "at home."

## Governance Issues

Considerable attention has been given to the question: Who should administer the AVTI's? Prior to decisions made during the 1983 legislative session, governance of the AVTI's usually was the responsibility of a local board of education although advisory power and, in some cases, de facto control was exercised by the State Board of Education. Uniformity in administrative practices and clarity about administrative authority were lacking.

During the 1983 legislative session in Minnesota, the legislature created a State Board of Vocational Education and empowered this Board to govern the State's 33 AVTI's. Surrounding the discussions about creating this board were speculations (and fears by many vocational educators) that there was a movement afoot to consolidate the AVTI system with the State's junior/community colleges within one administrative agency. As it turned out, such consolidation did not occur.

## Criticisms of Vocational Education

Related to the budget cuts and debate over governance of the AVTI's were a closer scrutiny of what was going on in education and a louder demand for accountability. In 1983, the Office of Legislative Auditor released a report in which AVTI's were criticized for offering programs with substandard enrollment and placement ratios. The State set expectations for program enrollment at 17, with a placement ratio of 51%. It was clear that the AVTI's were being called on to be more efficient and productive in spite of declining enrollment in some occupational areas and relatively high unemployment throughout the economy.

In summary, after expanding for several affluent years, vocational education in Minnesota had been retrenching in the past few years. AVTI's were terminating programs, secondary centers were closing, and AVTI's were expected to demonstrate increased efficiency and productivity. It is likely that these contextual factors influenced administrators' viewpoints about equity in vocational education.

Chapter II

# Findings of the Study

## Administrators' Concepts of 'Equity in Vocational Education'

In order to determine administrators' meanings of the phrase 'equity in vocational education,' their responses to all the interview questions were considered. However, their responses to the question, "What does 'equity in vocational education' mean to you?" were most influential in coding the administrators' conceptions of the phrase 'equity in vocational education.'

Two major themes emerged from the administrators' responses to interview questions: the concept of equality and the concept of equity.

The concept of equality in vocational education. Of the vocational education administrators interviewed, 37 or 77% expressed a concept of equality when they talked about equity in vocational education (Table A-2). Essentially, an administrator judged as having the concept of equality indicated that people should have the same access to and/or treatment within programs. (Most comments referred to equal access rather than equal treatment once access had been realized.) In 13 cases the administrators limited this equal access or treatment to males and females. An additional 24 administrators felt that people should be dealt with equally, but in addition to referring to gender, they mentioned race, religion, age, or handicaps as characteristics of people which should be considered in an attempt to treat people in the same way.

In response to the question, "What does 'equity in vocational education' mean to you?" administrators who expressed the concept of equality and who limited equal access and/or treatment to gender responded in the following ways:

> Equal opportunity for all students whether they're females or males to have access to training programs and to jobs afterwards.
>
> The same opportunity that a boy would have to advance in a particular occupation.
>
> Usually when you think of equity you think of the female and male thing. That is foremost. I think of that as the foremost problem.

> Try to get girls into the programs where boys are predominant, and try to get boys into programs where girls are predominant.

Responses representative of administrators who felt equal treatment referred to more than gender included the following:

> For every person regardless of sex, religion, color, creed, our obligation is to give them an equal chance.

> Everyone getting the same and doing the same.

> Nondiscrimination against any person whether it's by sex, religion, color, national origin, or whether they're on an aid program. Anybody that comes in the door can take any courses they want and they're all treated the same.

> Equal opportunity for all students regardless of sex, religion, race, special students.

> Everybody is being treated the same based on their abilities more than anything else. If you can do the job regardless of sex, creed, or color.

Expressions of equality also included references to administrative policies. For example, one administrator said that equity meant "Equal treatment where vocational versus academic education is concerned." Another person said that equity refers to "equal numbers of dollars spent on students."

The concept of equity in vocational education. Eleven administrators expressed a concept of equity when they discussed equity in vocational education. These administrators reflected a concern for individual needs, talents, interests, and rights. For them the goal is to provide each student with vocational education which does the most to help him or her develop the vocational skills and understandings which help him or her achieve a productive and meaningful life. Sex, race, age, and handicaps are not, in themselves, the factors to consider according to administrators holding the concept of equity.

When asked, "What does 'equity in vocational education' mean to you?" administrators with a concept of equity made comments such as:

> Equity is to meet individual differences. Find where they are at and what they need, and counsel with them. Select a program that meets their needs. Do everything you can to develop their fullest potential for job training. We need to have an atmosphere as conducive as possible for their learning.

> Equity is helping all students develop their potential.

The notion of 'fairness' also was common in the responses of these administrators and was discussed in relation to educational policies.

Fairness is what comes to mind. It can be equity between vocational education and other programs. It can also mean quality and quantity of vocational programs available to students. In terms of the first issue equity means vocational education being treated fairly among other educational programs. In the second area, if there are few programs available, I would have to say, "Is that fair?"

Equity just means fairness. Our school might not need as many funds, for instance, to run as some school down in the metro area because they have higher costs in terms of salaries and so on and so forth and higher rent or costs, particularly in salaries....It probably does cost more to run a school in the metro area but we still need to be treated fairly. Now they can't give us an equal number of dollars...but they should treat us fairly irrespective of the fact that you know there're different conditions that make some schools more expensive to run. That's just what I'm trying to explain by what I mean by fairly.

Summary. Administrators of vocational education programs hold different meanings for the phrase 'equity in vocational education.' About three-fourths of those interviewed expressed a concept of equality--sameness, likeness, proportionateness. The other one-fourth of the administrators explicated a concept of equity--fairness, justice, distribution of resources in relation to educationally-relevant characteristics of students. These two meanings for the phrase 'equity in vocational education' will be pivotal in the subsequent analysis and discussion presented in this report.

## Factors Influencing Administrators' Concepts of 'Equity in Vocational Education'

Because concepts are developed slowly and are determined by experience and reflection upon that experience, it is of interest to explore ways in which concepts of equity are formed. To identify experiences which might influence the content of their concept of 'equity in vocational education,' administrators were asked, "What has influenced your thinking about equity?" In response to this question, and without probing for elaboration, administrators listed a variety of influences, some of which could be considered personal:

- observations about salaries their wives receive;
- observations of their children's experiences;
- reflection on their own high school experience;
- participation in workshops on interpersonal relations (e.g., marriage enrichment, transactional analysis); and
- memories of being poor as a child.

Other influences related more specifically to being a professional educator:

- state leaders' efforts;
- changes in the law which affect the job;

- professional meetings;
- teaching experiences; and
- unions.

As shown in Table A-3, half of the administrators identified both personal and professional experiences as influences on their perceptions of equity. Of the 19 administrators who mentioned only professional influences, four of them cited legislation as the sole event which has affected their thinking about equity in vocational education. The types of influences were not different according to whether the administrators had been classified as holding the equality concept versus the equity concept.

Administrative Practices Involving the Concept of 'Equity in Vocational Education'

The administrators were asked to provide examples of decisions they had made which involved the concept of equity (question #8). These examples not only enrich our understanding of administrators' concepts of equity, but also they illustrate how concepts are related to professional practice. The examples of decisions were categorized as relating to personnel, students, or curriculum (Table A-4).

Personnel-related decisions. Thirty-two of the administrators described personnel-related decisions. Examples of their considerations about personnel in which they felt equity was a factor are:

> I need to keep numbers of women and minorities at certain levels and remember this when interviewing job applicants.
>
> I don't even think about it. I don't think about them as men and women. I think of them as running programs....I don't treat the men differently than the women.

One administrator stated that resources for staff need to be distributed equally. Another said he had dealt with counselors who were biased in their views of which students should be encouraged or allowed to study particular subject areas. Several administrators reported decisions which offered staff opportunity for inservice education on the topic of equity.

Student-related decisions. Students were emphasized in the decisions cited by 29 of the administrators. Although student-related decisions were mentioned as frequently by the "equality administrators" as by the "equity administrators," qualitative differences consistent with the particular concept of equity were noticed in the examples given by the two groups. When administrators who were thought to hold a concept of equality described decisions involving students, they talked about concerns such as:

--breaking down male and female stereotypes for programs;
--encouraging placement of minority students and special needs students;
--providing a cross-section of students in vocational education

courses; and
--eliminating prerequisites.

In contrast, the administrators judged to hold the concept of equity talked about other types of student-related concerns:

--in screening people for programs, considering issues such as past record, grades, achievement, and career thoughts;
--providing an atmosphere in which students emotionally support each other in a program;
--showing students they can succeed in order to help them improve their work in courses; and
--providing programs for students who cannot be absorbed into academics.

The impression obtained from examining what administrators said when they described their decisions involving equity is that administrators considered to have a concept of equity took into account multiple student-related factors and voiced special concern for individual needs of students. The "equality administrators" focused their concern more on making opportunities and situations similar.

Curriculum-related decisions. Ten administrators mentioned curriculum in their decisions which involved equity. Of the ten, seven had been classified as holding the concept of equality; all but one of their decisions involved making curriculum free of sex bias. The one exception dealt with designing curriculum appropriate for the learning-disabled student. Three administrators who had been categorized as holding the equity concept talked about decisions related to curriculum. They cited decisions made to assure relevant programs for students with varying ability levels and to meet a range of student and community needs; their curriculum-related concerns were not limited to any special group of students.

Summary. It is evident that vocational education administrators make numerous decisions--about personnel, about students, and about curriculum--which they perceive as involving the concept of equity. No statistically significant differences were found in the quantity or type of decisions made by administrators with a concept of equality versus those with a concept of equity. Not surprisingly, however, some qualitative differences seemed apparent when administrators talked about their student-related decisions.

## Administrators' Suggestions of Processes to Use in Evaluating the Status of 'Equity in Vocational Education'

If one were talking about the concept of 'enrollment in vocational education,' one could refer to tallies of numbers of students in vocational education courses. These tallies could serve as one indicator of enrollment. They are a referent of the concept. However, a concept as abstract as 'equity in vocational education' is far removed from the object or referent level. It is difficult to determine observable manifestations

of 'equity.' How do we know when 'equity' is practiced or achieved? What counts as 'equity'? In an attempt to find some answers to these questions, administrators were asked to suggest indicators to use in monitoring the status of equity in vocational education. A summary of their responses is reported in Table A-5. As this table shows, administrators identified processes--rather than indicators--to use in evaluating the status of equity. The processes, which suggest the type of indicators administrators seem to consider appropriate, are counting, talking, examining materials, and observing.

Counting. Counting was the most frequently listed method of determining the extent to which equity is practiced in a vocational education program. Thirty-nine of the administrators mentioned the use of counting. Proportionately, the "equality administrators" and the "equity administrators" suggested counting at about the same rate. However, qualitative differences were noticed in their indication of what ought to be counted. With only a couple of exceptions, the administrators categorized as having a concept of **equality** specified counting the gender and race of students and staff in order to assess whether or not there was a "mix" (the nature of the desired mix was not made clear). While expressing their belief that counting males, females, Blacks, Whites, and so on has some value, some of these administrators also stated that counting in itself has limited utility and additional processes are needed. Administrators holding the **equity** concept tended to suggest counting not gender or race but such phenomena as the attrition rate in a program, the composition of program drop-outs, the level of successful placement of graduates, and the number of programs available to students. These administrators also were likely to suggest additional methods of assessing the status of equity.

Talking. Twenty-three of the administrators suggested talking with people to determine the extent to which equity was practiced in a school. They recommended talking with students, parents, faculty, and community members to gain a sense of their perceptions of equitable or inequitable practices in vocational education.

Examining materials. Twenty-one administrators felt that examining written curricula, brochures, and records would be a way to evaluate provisions of equity. These administrators mentioned examining textbooks, posters, brochures, and other printed material for expressions of biases and stereotypes about groups of people. Some also suggested examining and comparing the salaries paid to males and females within and between programmatic areas.

Observing. Eleven administrators felt that it would be appropriate to observe program activities for indications of equity and inequity. They recommended observing classrooms, registration procedures, teacher evaluation practices, and job placements.

Summary. Unfortunately, indicators of equity in vocational education are neither obvious nor simple. Rather than identifying indicators, administrators suggested processes which could result in indications of the

status of equity in vocational education: counting, talking with people, examining printed materials, and observing practices. It should be noted that although these processes were separated here for analysis purposes, they actually are not mutually exclusive. For example, observations of certain classroom practices and types of comments gathered from talking with people can be tallied.

No statistically significant differences were found in the frequency with which administrators with the equality concept and those with the equity concept mentioned various processes for monitoring equity in vocational education.

Administrators' Perceptions of Facilitators of 'Equity in Vocational Education'

Administrators were asked, "What do you see as conditions which facilitate the provision of equity in vocational education?" From inspection of Table A-6, one concludes that "attitudes" were suggested most often as facilitators of equity, although such factors as awareness, legislation, inservice education, and funding also were offered by many of these same people. One difficulty the interviewers had was deciding whether administrators were citing attitudes or awareness. Because awareness could be viewed as a precursor of an attitude, it might be more meaningful to group the two. If that were done, there would be near unanimity in suggesting that a significant facilitator of equity is cognitive in nature as opposed to the other suggestions which are observable activities: legislation, inservice education, and funding. The fact that most of the respondents suggested a facilitator which is cognitive in character should have implications for policy decisions concerning the attainment of equity.

Attitudes. Thirty-nine of the suggestions of facilitators of equity were categorized as representing the idea of attitude. And, as administrators talked, they referred to attitudes held or embodied by various groups: fellow staff members, the school and local governing body, the Minnesota Department of Education, employers, and society in general.

It was typical for an administrator who referred to the attitudes of other staff members to suggest that unless the staff were committed to communicating a concept of equity, it would not exist in a classroom--especially when it involves accepting non-traditional students as participants in a program. In this same context, some administrators said that the attitude of the teaching staff is a facilitator or a barrier and that it would be a facilitator when "faculty are willing to promote the non-traditional student" and are able to "approach students" before they make course and career decisions.

When administrators discussed attitudes embodied by the school and local governing unit as a facilitator, they spoke of attitudes reflected by the rules and regulations, both explicit and implied, under which the school operates. Administrators specified policies and practices affecting course descriptions, entrance and admittance policies to both the school

and its programs, salary schedules, and the hiring, promotion, and retention of staff.

When the attitude reflected by the Minnesota Department of Education was cited as a facilitator, it was said that the State could and does present its attitudes in its public relations activities--both in what is communicated directly and in what is implied. One administrator suggested that the "State should publish a pamphlet detailing its equal opportunity guidance procedure" and that it should develop a "common policy for all schools." Another response was that the State communicates a particular attitude about equity by the way it treats its own employees. Other discussion of how the attitudes reflected by the Department of Education facilitated equity addressed the importance given to the State's evaluation process and to a proposal to provide extra funding for equity-related activities.

Administrators also said that employers could facilitate the provision of equity by demonstrating their willingness to hire non-traditional employees. More than a few of the administrators mentioned that it was futile to recruit and/or prepare students for positions in which they would not be hired.

In many ways, employers' attitudes are a function of attitudes of society in general. Frequently administrators said that to facilitate equity in a societal institution such as vocational education, equity must be practiced in society. These administrators stated that there must be general support of the idea that "women will be a part of the work force" and that "equity is a positive concept." The following quotation expresses administrators' views that equity needs to be practiced in the society at large and that it is an ideal toward which society must continually strive.

> You can't repair a chain by just addressing one link. It has to be a continued effort. Equity has to start with the young kids and it will take time to evolve. It's not going to be there until these kids have grown up and they in turn are parents and management people in industry. It's gotta go through an evolutionary kind of a process.

Other administrators said that for equity to be facilitated by societal attitudes, we "need an understanding between men and women themselves of each other's abilities" and we need to have "non-traditional role model successes for non-traditional students."

Awareness. Twenty-seven of the responses about facilitators of equity were categorized as relating to awareness; as pointed out earlier, they were closely related to attitudes. The responses identifying awareness as a facilitator could be grouped similarly to the responses classified as attitudes: staff, school, employer, and society. However, comments categorized as referring to attitudes related to fairly observable outcomes, while comments categorized as awareness expressed more of a propensity to form an attitude. When administrators identified awareness as a facilitator, they expressed the idea that awareness facilitates

understanding: realizing that nontraditional students can succeed, realizing that nontraditional staff can perform capably, and being open "to developing a cooperative relationship."

Legislation, inservice education, and funding. Legislation, inservice education, and funding were cited 17, 16, and 7 times, respectively, as facilitators of equity. Most often suggestions categorized as legislation referred to having laws to encourage the provision of equity in vocational education. These could be federal, state, or local laws. Federal vocational education legislation (P.L. 94-482) and the Education of the Handicapped Children Act (P.L. 94-142) are examples.

Some administrators said that inservice education could facilitate equity by creating awareness and modifying attitudes. One respondent stated specifically that the purpose of inservice education is "to change teacher attitude." Another, recognizing the need to affect awareness before attitudinal change can occur, stated that the goal of the inservice education experience would be to "bring (things) to a conscious level."

The seven responses which identified funding as a facilitator suggested funding the equity-related activities of staff and increasing financial aid for students.

Summary. Administrators' identifications of facilitators of equity in vocational education ranged from processes and activities which already exist to policies and practices which could be developed. And, as mentioned in the introduction to this section, it is important to note that the facilitators recognized by administrators were more likely to be cognitive in character (attitudes and awareness) rather than physical activities (legislation, inservice education, and funding). Administrators holding an equality concept and those holding an equity concept did not differ in the extent to which they identified any of the types of facilitators.

## Administrators' Perceptions of Barriers to 'Equity in Vocational Education'

After administrators talked about their perceptions of facilitators of equity, they were asked, "What are barriers to providing equity in vocational education?" A summary of the responses, presented in Table A-7, indicates that administrators identified a broader range of barriers than facilitators. In analyzing responses to the question about barriers, four categories which were used to summarize facilitators also were found useful here: attitudes, funding, awareness, and legislation. Three additional categories were needed to account for all of the responses: student characteristics, physical conditions, and time.

Not only were the barriers listed by the administrators more varied than the facilitators they cited, but also the barriers could be considered more physical rather than cognitive in character. Student characteristics, physical conditions, level of funding, enforcement of laws, and amount of time are relatively easy to observe directly or indirectly.

Attitudes. Many of the 44 administrators who offered attitudes as a barrier simply stated that "attitudes in general" were the "main reason" or "big barrier" which accounts for inequity in vocational education programs. When administrators were asked to expand upon these responses, they suggested several sources of such attitudes.

A primary source of attitudinal barriers, as some administrators see it, is that of "industry" or the "employer." Administrators commonly would say that no matter what was done at the school level, once the student got out into the "real world" he or she would have to face the attitudes of industry. And it was implied that these attitudes of industry are unalterable.

Another common cluster of clarifying responses about attitudes suggested the "real world," in this case the basic socialization process through which all of us must pass, and through which we develop certain attitudinal predispositions. This referent was used to describe everything from community attitudes to career choices determined by elementary and secondary school experiences. Related to this, one grouping of administrators' responses dealt with providing dignity for noncollege experiences and another cluster referred to the unchanging preconceived attitudes of faculty and administrators toward nontraditional students. Some of the administrators suggested that parents, teachers, and counselors were always emphasizing the status of college-track curricula and imposing this belief on students.

Problems of staff attitudes were illustrated to some extent by the comment, "If you've got a guy that likes to tell stories about females and he wants to be a little on the raw side, I don't know of any laws in the world that can change that." Administrators were saying that unless some instructors and administrators change their attitudes, any efforts at equity will be hard-pressed to succeed.

Funding. Of the 15 suggestions saying that funding was a barrier to the provision of equity, most were complaints about the loss of existing funds rather than questions about the distribution of whatever funds are available. As one administrator stated it, "Cuts force you to put too many kids in a class, and special needs kids don't get served, kids don't get personal attention." The consensus seemed to be that cuts in funding adversely affected the achievement of equity goals. When cuts are made, efforts which previously had been made to provide equity and which required funding in order to continue were the first to become affected and eliminated.

Awareness. As was true in analyzing facilitators, the researchers had difficulty distinguishing comments about awareness from those referring to attitudes. In general, the 11 responses coded as "awareness" suggested that the information upon which attitudes were formed was faulty. However, administrators stated or implied that this information was modifiable and that a good way to provide information and create awareness was to see a successful example. A theme in these responses was that one barrier to providing equity in vocational education is inadequate or inaccurate

information, and that positive awareness and attitudes could be developed by observing successful models.

Legislation. The idea that equity can be encouraged by mandate or coercion seemed to underlie 10 responses. "Militant feminists," laws, and administrative processes were delineated as examples of the wrong way to encourage equity. They were perceived as efforts to force people to behave in certain ways and as efforts which actually could backfire. Some administrators said that by including more personnel in decision making processes rather than trying to force them to act in specified ways, the state and/or local boards could achieve their goals more easily.

Student characteristics. The example of a woman who wants to be a fireman and to do so must be able to carry a person of a certain weight a specified distance was used to illustrate this barrier. Another example was of a woman who asked a man of similar body size to move a cylinder head so she could work on it. Some administrators felt that students' physical characteristics as women or as handicapped people were such that they prevented their enrollment in certain programs. In contrast, males were not perceived to possess any characteristics which made it impossible or inappropriate for them to participate in any vocational education programs.

Physical conditions and time. A few administrators mentioned either physical conditions or time as barriers. They said that sometimes classes have so many students in them that students with special needs don't receive the individual attention they need, and sometimes there simply isn't enough time allotted so that all students can develop skill and understanding.

Summary. Barriers to the provision of equity in vocational education were seen by administrators as being both physical and attitudinal. Administrators' meanings of equity did not relate significantly to any category or number of barriers.

## Administrators' Perceptions of the Importance of 'Equity in Vocational Education'

Two questions were asked to elicit administrators' perceptions of the relative importance of the issue of equity in vocational education: "We have a lot of issues to consider in vocational education. From your point of view, how important is 'equity in vocational education'?" and "On a scale of 1 to 10, with 10 being the most important, where does equity rank? What is number 10? What is number 1?"

Almost two-thirds of the administrators felt that equity is a very important issue (Table A-8). About one-third said it was a moderately salient issue, and only two administrators thought it relatively unimportant.

Very important. Fourteen administrators considered equity to be a very important issue--so important, in fact, that they could not separate it as an isolatable concern which could be rated in relation to other professional issues. Examples of this point of view are:

> It's a part of the morale of the school....It's a part of all we do.
>
> Equity is something that needs to be incorporated into every decision.
>
> Equity is always important....Equity should be an integrated part of the curriculum.
>
> It is woven throughout everything. It permeates everything you do; it's not a separate category.

The administrator who made this last comment explained it by adding:

> As long as it's isolated as an issue, it tends to make you think that you could take a single treatment or do three or four things and then you're okay with regard to equity, and that's not true. Until everything you do is done with equity, you don't really have a good picture of equity.

Another 16 administrators who indicated a belief that equity is a very important issue did rate it as a separate issue and assigned it an 8, 9, or 10 on a 10-point scale. Equally important concerns for these administrators included: curriculum development, instructor capability, budgeting, technological relevance, and governance.

Moderately important. Fifteen administrators assigned equity a rating of 4, 5, 6, or 7 on a 10-point scale, and these ratings were interpreted as representing a belief that equity is a moderately significant topic in vocational education. Generally, these administrators considered finance-related concerns as more important than equity. Most perceived a need to ensure the existence of functioning programs before attending to equity concerns, and others judged that sufficient progress had been made in equity-related practices so that the issue of equity no longer merited priority emphasis. Issues rated as less important by these administrators included: maintenance of physical facilities, routine management and "paper shuffling," youth organizations, and scheduling.

Of little importance. One of the two administrators who rated equity as less than a 4 on a 10-point scale said that the possibility that their institution would be closed was likely, and the other administrator concluded that equity was a problem that had been "solved." Clearly, these two administrators--for different reasons--were concentrating on issues other than equity.

Summary. Generally, administrators perceived equity to be an important concern in vocational education. These perceptions did not relate to the meaning the administrator held for the concept of equity in vocational education.

## Administrators' Perceptions of the Status of 'Equity in Vocational Education'

Although the concept of equity is not new to those in education or vocational education, it has received heightened attention during the last decade. Legislation, inservice education, and the mass media have made it virtually impossible to be unaware of efforts being made to alter practices in educational settings so as to increase the provision of equity for everyone in our society. However, as with most efforts to alter human behavior, mere slogans rather than observable changes in practices could be the primary result of equity-related efforts. Has anything changed?

To find out the extent to which administrators of vocational education programs have observed changes in the status of equity in vocational education, they were asked: "From your perspective, has vocational education become more or less equitable during the past five years?" Most administrators reported perceptions of improvement in the status of equity; relatively few perceived no change or a worsening of the status (Table A-9).

Improved status. Forty of the 48 administrators indicated that from their perspective the status of equity in vocational education has improved during the past five years. Comments from these administrators include:

> In terms of programs being offered, I think they've gone a hundred percent with it.
>
> I think that we have grown up a lot. I think that we're accepting it more.
>
> They were doing a real good job for awhile....I think people were brow-beat for a long time, and people are more complacent now. But the result is that it has become part of their thinking. Programs aren't more equitable, but recruiting is.

A few administrators offered the opinion that vocational education in Minnesota is "well ahead of the rest of the country" in efforts being made to achieve sex equity. Some administrators said they observed more change in urban areas, while other administrators thought that rural areas had made more progress. Overall, the most frequently mentioned type of change was that of increased enrollment of students in programs not traditional for their sex.

However, even though most administrators were encouraged by improvements in the status of equity in vocational education, they did not feel satisfied or complacent: "We're not where we should be." "It's a battle that's never done."

No change in status. Six administrators reported that they observed little, if any, change in equity-related policies and practices. Some thought budget cuts were hurting efforts to provide equity and erasing

whatever progress might have been made previously. Others felt that real changes were not occurring in spite of considerable hubbub and statistical data that might give an impression of improvement.

> I think it's masked. I think we've made attempts, but in my own mind I don't think we've improved all that much over the last five years. I think statistically that it'll show that [improvement]....but I really don't think it's improved as much as anybody would have hoped it to improve.

Worsened status. Only two administrators--both working at the secondary level--perceived a worsening in the status of equity in vocational education. They felt that reductions in program offerings resulted in diminished opportunities for students.

Summary. Over 80% of the administrators interviewed shared the view that in the past five years progress has been made in equity-related policies and practices in vocational education. They caution, however, that more work needs to be done. The administrators who have seen no change raise questions which challenge vocational educators to distinguish between fundamental improvements and mere impressions of progress. And the administrators who report a worsening in the provision of equity raise questions about the relation between program offerings and equity for students. Views about the status of equity did not vary significantly with the concept administrators held for equity.

## Administrators' Perceptions about Responsibility for 'Equity in Vocational Education'

In the field of vocational education who should be responsible for promoting equity? This question was asked of administrators in the interview, and, obviously, allowed them to offer multiple responses. Some of the miscellaneous responses included: parents, the school's sex equity committee, the school board, total staff, and everyone. For the most part, administrators mentioned educators at the local school level (administrators, teachers, and counselors) and people beyond the local level (Table A-10).

Administrators. Almost all of the administrators said that school administrators ought to assume some of the responsibility for decreasing inequities in vocational education. They saw administrators as leaders and role models who could influence attitudes and behaviors of others in the school.

More than half of those interviewed viewed school administrators at the local level as policy-makers and people who determined to a considerable degree the effectiveness of a school's equity committee. The other administrators felt that they and other local school administrators were implementors, not originators, of equity-related policy. They perceived their responsibility to be that of supporting and encouraging others' plans to improve equity in vocational education.

Teachers. Teachers were also seen as having responsibility for promoting equity. Some administrators even felt that teachers were in the most strategic position to influence equity-related practices and attitudes.

Counselors. Only 20% of the administrators cited counselors as people who shared responsibility for improving equity. However, a few administrators felt that counselors played the most crucial role in determining the extent to which students experienced equitable opportunities in the school system.

Personnel beyond the local level. In addition to listing people at the local school level who shared responsibility for providing equity, some administrators said that people at state and federal levels shared responsiblity. These people included legislators and staffs of departments of education.

Summary. Many people in various positions are seen by administrators as responsible for providing equity in vocational education. With only a few exceptions, they perceive themselves as either making or implementing policy which is intended to improve equitable opportunities and treatment for all students. Administrators' concepts of equity did not correlate in any systematic way with their opinions of who is responsible for providing equity in vocational education.

## Relations Between Administrators' Meanings of 'Equity in Vocational Education' and the Size of Their Community

One question which arose during data analysis was: Does an administrator's concept of equity have anything to do with where he or she lives, specifically the size of the community in which he or she works? To examine any such relation, administrators were grouped according to whether they worked in one of the State's seven SMSA's (a definition for SMSA is given in a note to Table A-1) which are considered urban areas or whether they worked in rural areas of Minnesota. Twenty-two of the administrators in the sample worked in rural areas; 26 were from urban areas.

When administrators' meanings of equity--equality or equity--were compared according to whether the administrators were from rural (non-SMSA) areas or urban (SMSA) areas, no differences were found. However, two statistically significant corrections were found when data were group in different ways.

The second way in which the data were examined was to compare the meanings of equity held by the 19 administrators in the Twin Cities (Minneapolis-St. Paul) area with the meanings held by the 29 administrators outstate, that is, outside of the Twin Cities area (Table A-11). Using a chi square test, it was found that compared with vocational education administrators in outstate areas, those in the Twin Cities area were much more likely to express a concept of equality rather than equity ($p<.05$).

And the third comparison resulted in a correlation more highly significant statistically (Table A-12). Administrators were categorized as

working in one of three areas: Twin Cities, other urban, and rural. When a chi square test was applied, it showed an important distinction which was not apparent when the meanings of equity held by the Twin Cities administrators were compared with the meanings held by administrators outstate. This comparison revealed that administrators in the Twin Cities definitely tended to hold a concept of **equality**; administrators in rural areas also, but not as frequently, voiced an **equality** concept; and the administrators who worked in urban areas other than the Twin Cities (areas including and surrounding Duluth, Moorhead, Grand Forks, Rochester, LaCrescent, and St. Cloud) were most likely to hold a concept of **equity**.

Chapter III

# Summary and Implications of the Study

This study sought to examine the meaning of 'equity in vocational education.' More specifically, it sought to identify the meanings held and used by administrators of vocational education at the secondary and post-secondary levels in Minnesota. To further understand the "in use" meanings of equity in vocational education, administrators were asked to reflect on issues related to their perspectives on equity in vocational education.

## Summary of the Findings

Findings of the interviews of 48 administrators of vocational education programs throughout Minnesota are summarized below.

- Administrators, as a group, held different meanings for the phrase 'equity in vocational education.' About three-fourths of the administrators expressed a concept of equality, indicating that educational programs and policies should be guided by the notions of sameness, likeness, proportionateness. The remaining administrators voiced a meaning of equity, stating that a guiding principle in vocational education should be the distribution of resources in relation to educationally-relevant characteristics of students.

- Administrators identified a wide variety of personal and professional experiences (e.g., memories of being poor as a child and attendance at professional meetings) as factors that contributed to their interpretation of 'equity in vocational education.'

- Administrators reported that equity entered into decisions they made relating to personnel, students, and curriculum. Administrators holding an equality concept tended to give examples of decisions which involved making opportunities and situations similar for students and staff. Administrators considered to hold an equity concepts were more likely to take into account multiple student-related factors and voiced concern for students' individual needs.

- Administrators suggested a variety of processes that could be used to indicate the status of equity in vocational education. Those

processes, which could be used singly or in combination, include: counting, talking with people, examining printed materials, and observing practices.

- Administrators identified five categories of factors that facilitate the provision of equity in vocational education. In decreasing order of emphasis, those categories are: attitudes held and embodied by people involved in vocational education and by society in general; awareness of people and society about equity issues; legislation at federal, state, and local levels that support equity in vocational education; inservice education that creates awareness and modifies attitudes related to equity; and funding to support staff activities and aid for students.

- Administrators identified seven categories of factors that serve as barriers to the provision of equity in vocational education. In decreasing order of emphasis, those categories are: attitudes held by employers, the "real world," and staff; funding cuts; awareness which was inadequate or based on faulty information; legislation that was perceived as coercive; student characteristics that were perceived as legitimate for denying enrollment in certain programs; and physical conditions in classrooms and time limitations of teachers.

- Administrators, generally, felt that equity is an important issue. Almost two-thirds of the administrators ranked equity as a very important issue, almost one-third considered equity to be a moderately important concern, and only two administrators said it was of little importance.

- Administrators, generally, shared the view that progress has been made in equity-related policies and practices in vocational education. Although over 80% of the administrators felt that progress had been made, they cautioned that more work needs to be done. The six administrators who thought little or no progress has been achieved wondered if budget cuts were eroding progress that might have occurred previously and if improvements are more of an impression than a genuine change. The two administrators who perceived a worsening in the status of equity in vocational education felt that reductions in program offerings were diminishing opportunities for students.

- Administrators placed responsibility for equity in vocational education with people in a variety of positions. Almost all considered themselves responsible for decreasing inequities in vocational education. They also assigned responsibility to teachers, counselors, and personnel beyond the local level (e.g., legislators and personnel in departments of education).

- Administrators' meanings of 'equity in vocational education' were correlated significantly with their location. Administrators in the Twin Cities area of Minneapolis-St. Paul held a concept of equality; administrators in rural areas also, but less frequently, expressed an equality concept; and administrators who worked in urban areas other

than the Twin Cities (areas including and surrounding Duluth, Moorhead, Grand Forks, Rochester, LaCrescent, and St. Cloud) were most likely to hold a concept of equity.

## Implications of the Findings

What do these findings imply for the practice of vocational education and the policies which govern the practice? Several implications could be drawn. Four will be suggested below.

- Greater clarity and depth of understanding of 'equity in vocational education' should be developed. Findings of the study suggest that to the extent that administrators of vocational education could articulate a meaning for 'equity in vocational education,' they expressed different views of what is to be accomplished, and the great majority (77%) limited the goal to that of providing equal access to and/or treatment within programs. Ways in which clarity and depth of understanding could be developed include: inservice education focused specifically on the meaning and goals of equity in vocational education, policy statements on equity issued by the Minnesota Department of Education and the State Board of Vocational Technical Education, and increased funding to be used for increasing equity in vocational education.

- Administrators will be receptive to policies and programs that enhance their ability to increase the extent to which their programs are equitable to students. This implication is drawn from the findings that they consider equity an important issue and one for which they assume responsibility. Involving administrators in developing equity-related policies and activities would seem to be preferable to issuing directives, mandating goals, or in any other way creating what administrators consider coercive and punitive.

- More work needs to be done on developing indicators of equity in vocational education. Not surprisingly, administrators did not identify indicators when they were asked to do so. Their responses focused on processes such as counting and observing rather than criteria for monitoring the status of equity in vocational education. The development and use of indicators would, of course, depend on a clear and common meaning of the phrase 'equity in vocational education.'

- More research should be conducted on the topic of equity in vocational education. Some suggestions for foci of further studies include: perspectives and practices of counselors as they related to equity in vocational education; perspectives and practices of vocational education teachers as they relate to equity in vocational education; the influence of location on administrators' views of equity in vocational education; and the influence of federal and state policies on equity in vocational education. Perhaps it would be valuable to encourage and support "grass roots" studies of equity in vocational education which involve people at local levels in an examination of their educational programs and practices that affect students' ability to achieve an equitable education.

Appendix A

(Tables)

Table A-1

Administrators' Demographic Characteristics

| Characteristics | Frequency | |
|---|---|---|
| | Absolute[a] | Relative (%)[b] |
| School level | | |
| Secondary | 23 | 47.9 |
| Postsecondary | 25 | 52.1 |
| Position | | |
| Director | 36 | 75 |
| Assistant Director | 12 | 25 |
| Age | | |
| 30-39 years | 7 | 14.6 |
| 40-49 years | 18 | 37.5 |
| 50-59 years | 19 | 39.6 |
| 60-69 years | 4 | 8.3 |
| Educational level | | |
| Bachelor's | 10 | 20.8 |
| Master's | 26 | 54.2 |
| Specialist | 7 | 14.6 |
| Doctorate | 5 | 10.4 |
| Sex | | |
| Male | 42 | 87.5 |
| Female | 6 | 12.5 |
| Portion of time spent on administration | | |
| Full-time | 38 | 79.2 |
| Part-time (50-95%) | 6 | 12.5 |
| Part-time (0-49%) | 4 | 8.3 |
| Years experience in current positon | | |
| 0-5 years | 14 | 29.2 |
| Over 5 years | 34 | 70.8 |
| Years experience as an administrator | | |
| 0-7 years | 11 | 22.9 |
| Over 7 years | 37 | 77.1 |
| Location of school[b] | | |
| Rural | 22 | 45.8 |
| SMSA1 (Duluth area) | 1 | 2.1 |
| SMSA2 (Moorhead area) | 4 | 8.3 |
| SMSA3 (East Grand Forks area) | 1 | 2.1 |
| SMSA4 (St. Cloud area) | 0 | 0.0 |
| SMSA5 (Mpls.-St. Paul area) | 19 | 39.6 |
| SMSA6 (Rochester area) | 1 | 2.1 |

[a] $n = 48$. [b] SMSA = Standard Metropolitan Statistical Area, a unit used by the U.S. Census Bureau, is defined as one or more contiguous nonagricultural counties containing at least one city of 50,000 or more (or, a pair of contiguous twin cities of at least this joint size), and having a generally metropolitan character based on the counties' social and economic integration with the central city (U.S. Bureau of the Budget, 1967).

Table A-2

Administrators' Concepts of 'Equity in Vocational Education'

| Meaning | Frequency | |
|---|---|---|
| | Absolute[a] | Relative (%) |
| Equality | 37 | 77 |
| Equity | 11 | 23 |

[a] $n = 48$.

Table A-3

Types of Factors Influencing Administrators' Concepts of Equity According to Their Meaning of Equity

| Type of factor | Frequency | |
|---|---|---|
| | Absolute[a] | Relative (%)[b] |
| Personal | | |
| Equality | 5 | 14 |
| Equity | 0 | 0 |
| Professional - legislation | | |
| Equality | 4 | 11 |
| Equity | 0 | 0 |
| Professional - other | | |
| Equality | 11 | 30 |
| Equity | 4 | 36 |
| Both personal and professional | | |
| Equality | 17 | 46 |
| Equity | 7 | 64 |

[a] $n = 48$. [b] 37 administrators were categorized as having an 'equality' meaning and 11 as having an 'equity' meaning.

Table A-4

Types of Concerns Involved in Administrators' Equity-Related Decisions According to Their Meaning of Equity

| Type of concern | Frequency | |
|---|---|---|
| | Absolute[a] | Relative (%)[b] |
| Personnel | | |
| Equality | 25 | 68 |
| Equity | 7 | 64 |
| Students | | |
| Equality | 20 | 54 |
| Equity | 9 | 82 |
| Curriculum | | |
| Equality | 7 | 19 |
| Equity | 3 | 27 |

Note. Columns total more than 48 and 100% because respondents could give more than one example of decisions.

[a] $n = 48$. [b] 37 administrators were categorized as having an 'equality' meaning and 11 as having an 'equity' meaning.

Table A-5

Administrators' Suggestions of Processes to Use in Evaluating the Status of Equity According to Their Meaning of Equity

| Process to use in evaluating | Frequency | |
|---|---|---|
| | Absolute[a] | Relative (%)[b] |
| Counting | | |
| Equality | 29 | 78 |
| Equity | 10 | 91 |
| Talking with personnel, students, and others | | |
| Equality | 19 | 51 |
| Equity | 4 | 36 |
| Examining materials | | |
| Equality | 15 | 41 |
| Equity | 6 | 55 |
| Observing | | |
| Equality | 7 | 19 |
| Equity | 4 | 36 |

Note. Columns total more than 48 and 100% because respondents could give more than one example of processes.

[a] $n = 48$. [b] 37 administrators were categorized as having an 'equality' meaning and 11 as having an 'equity' meaning.

Table A-6

Administrators' Perceptions of Facilitators of Equity According to Their Meaning of Equity

| Facilitator | Frequency | |
|---|---|---|
| | Absolute[a] | Relative (%)[b] |
| Attitudes | | |
| Equality | 29 | 78 |
| Equity | 10 | 91 |
| Awareness | | |
| Equality | 20 | 54 |
| Equity | 7 | 64 |
| Legislation | | |
| Equality | 14 | 38 |
| Equity | 3 | 27 |
| Inservice education | | |
| Equality | 14 | 38 |
| Equity | 2 | 18 |
| Funding | | |
| Equality | 3 | 8 |
| Equity | 4 | 36 |

Note. Columns total more than 48 and 100% because respondents could give more than one example of facilitators.

[a]n = 48. [b]37 administrators were categorized as having an 'equality' meaning and 11 as having an 'equity' meaning.

Table A-7

Administrators' Perceptions of Barriers to Equity
According to Their meaning of Equity

| Barrier | Frequency | |
|---|---|---|
| | Absolute[a] | Relative (%)[b] |
| Attitude | | |
| Equality | 33 | 89 |
| Equity | 10 | 91 |
| Funding | | |
| Equality | 9 | 24 |
| Equity | 6 | 55 |
| Awareness | | |
| Equality | 8 | 22 |
| Equity | 3 | 27 |
| Legislation | | |
| Equality | 7 | 19 |
| Equity | 3 | 27 |
| Student characteristics | | |
| Equality | 2 | 5 |
| Equity | 2 | 18 |
| Physical conditions | | |
| Equality | 2 | 5 |
| Equity | 1 | 9 |
| Time | | |
| Equality | 1 | 3 |
| Equity | 1 | 9 |

Note. Columns total more than 48 and 100% because respondents could give more than one example of barriers.

[a]n = 48. [b]37 administrators were categorized as having an 'equity' meaning and 11 as having an 'equity' meaning.

Table A-8

Administrators' Perceptions of the Importance of Equity According to Their Meaning of Equity

| Level of importance | Frequency | |
|---|---|---|
| | Absolute[a] | Relative (%)[b] |
| Very important | | |
| Equality | 22 | 61 |
| Equity | 8 | 73 |
| Moderately important | | |
| Equality | 12 | 33 |
| Equity | 3 | 27 |
| Of little importance | | |
| Equality | 2 | 6 |
| Equity | 0 | 0 |

[a] $n$ = 47; 1 missing observation. [b] 36 administrators were categorized as having an 'equality' meaning and 11 as having an 'equity' meaning.

Table A-9

Administrators' Perceptions of the Status of Equity According to Their Meaning of Equity

| Status | Frequency | |
|---|---|---|
| | Absolute[a] | Relative (%)[b] |
| Has improved in past 5 years | | |
| Equality | 33 | 89 |
| Equity | 7 | 64 |
| Has not changed in past 5 years | | |
| Equality | 3 | 8 |
| Equity | 3 | 27 |
| Has become worse in past 5 years | | |
| Equality | 1 | 3 |
| Equity | 1 | 9 |

[a] $n$ = 48. [b] 37 administrators were categorized as having an 'equality' meaning and 11 as having an 'equity' meaning.

Table A-10

Administrators' Perceptions About Responsibility for Equity in Vocational Education According to Their Meaning of Equity

| People responsible | Frequency | |
|---|---|---|
| | Absolute[a] | Relative (%)[b] |
| Administrators at local level | | |
| Equality | 34 | 92 |
| Equity | 10 | 91 |
| Teachers | | |
| Equality | 24 | 65 |
| Equity | 4 | 36 |
| Counselors | | |
| Equality | 9 | 24 |
| Equity | 1 | 9 |

Note. Columns total more than 48 and 100% because respondents could identify more than one type of person as being responsible for equity.

[a]$n = 48$. [b]37 administrators were categorized as having an 'equality' meaning and 11 as having an 'equity' meaning.

Table A-11

Correlation Between Administrators' Meaning of Equity in Vocational Education and Their Location (Twin Cities versus Outstate)

| Meaning | Location | |
|---|---|---|
| | Twin Cities (n = 19) | Outstate (n = 29) |
| Equality | 18 | 19 |
| Equity | 1 | 10 |

$x^2(1) = 4.02$; $p < .05$.

Table A-12

Correlation Between Administrators' Meaning of Equity in Vocational Education and Their Location (Twin Cities, Other Urban, and Rural)

| Meaning | Location | | |
|---|---|---|---|
| | Twin Cities (n = 19) | Other Urban (n = 7) | Rural (n = 22) |
| Equality | 18 | 2 | 17 |
| Equity | 1 | 5 | 5 |

$x^2(2) = 12.68$; $p < .002$.

Appendix B

(Interview Schedule)

INTERVIEW SCHEDULE

1. First of all, would you describe the nature of your position? What are your various job-related activities?

2. How long have you been in this position?

3. What, if any, administrative positions in vocational education have you held prior to this position?

4. For how many years have you been an administrator of vocational education programs?

5. 'Equity' is a term that seems to have different meanings for different people. What does 'equity in vocational education' mean to you?

6. What has influenced your thinking about equity?

7. Do you remember when you first started to think about equity in vocational education?

8. How has equity entered into some decisions you've made recently as part of your job?

9. If you were to suggest to the State Department of Education some indicators to use in monitoring the status of equity in vocational education, what would you suggest?

10. We have a lot of issues to consider in vocational education. From your point of view, how important is 'equity in vocational education'?

11. On a scale of 1 to 10, with 10 being the most important, where does equity rank? What is number 10? What is number 1?

12. To what extent do you think our vocational education programs in Minnesota provide equity?

13. Has it--equity in vocational education--changed generally or only in certain areas?

14. What about equity has changed most?

15. What about equity is still in need of change?

16. From your perspective, has vocational education become more or less equitable during the past five years?

17. Most likely there are some policies, attitudes, and other considerations which encourage equity, and there are some which impede equity in vocational education in Minnesota. What do you see as conditions which facilitate the provision of equity in vocational education?

18. What are barriers to providing equity in vocational eudcation?

19. In the field of vocational education who should be responsible for promoting equity?

20. Where do administrators fit into this?

21. Now there are a couple questions I would like to ask about you personally. Since high school, what academic degrees have you earned and in what areas?

22. I'm going to list some age ranges. Would you tell me in which category you fit? (under 30; 30-39; 40-49; 50-59; 60 and over)

23. I've finished my questions. Is there anything you'd like to add about equity in vocational education?

Appendix C

(Letter Inviting Participation in Study)

UNIVERSITY OF MINNESOTA
TWIN CITIES

College of Education

Minnesota Research and Development Center
for Vocational Education
Department of Vocational and Technical Education
R460 Vocational and Technical Education Building
1954 Buford Avenue
St. Paul, Minnesota 55108

February 25, 1983

Dear _____:

The purpose of this letter is to request your participation in a research project of the Minnesota Research and Development Center (MRDC). As you may know, the MRDC staff conducts research and development activities to improve vocational education in Minnesota.

A current MRDC project is concerned with 'equity in vocational education.' Based on our advisory committee's recommendations and our review of the literature, we are conducting an exploratory study to determine vocational education administrators' perceptions of 'equity in vocational education.' In addition, we are interested in other aspects of the issue as indicated in the following paragraph. We wish to collect this information from administratirs because of their important role and comprehensive understanding of the vocation education process.

Your participation would involve a telephone interview of approximately 45 minutes. The interview would focus on: (1) your perceptions of 'equity in vocational education,' (2) indicators that could be used in monitoring the status of equity, (3) the importance of equity in vocational education, and (4) barriers and facilitators to providing equity in vocational education. The interview would be recorded to insure an accurate record and would be kept confidential. Only findings for the group would be included in the report to be published and distributed to you and others in the State this summer.

Within the next two weeks, Linda Ernst or Steve Scholl, graduate research assistants on this project, will be telephoning you regarding your participation in the study. If you agree to participate, Linda or Steve will schedule an interview at a time which is convenient for you during March.

Because of the importance of exploring the topic of equity, we encourage you to participate in this research. Of course, your decision about whether or not to participate will not prejudice your future relations with the MRDC or any other unit at the University. If you have any questions, please write, or call us at (612) 373-3838.

Sincerely,

Brandon B. Smith, Director
Minnesota Research and Development Center

Jane Plihal, Project Director
Equity in Vocational Education